THE ROLE OF INFORMATION TECHNOLOGY IN PUBLIC MANAGEMENT PROCESS WITH PARTICULAR REFERENCE TO SOKOTO STATE MINISTRY OF FINANCE

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CERTIFICATION

This research project has been read and approved as meeting requirements for the award of master degree in public Administration by the department of public administration faculty f management sciences Usmanu Danfodiyo University, Sokoto.

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DEDICATION

I dedicate this research project to my grandfather, late Alhaji Usman (Magajin Dunguza)

ACKNOWLEDGMENTS

ALL PRAISE and thanks be to Allah who in his infinite mercy has blessed me with opportunity of undergoing this degree programme.

I want to express my sincere gratitude and appreciation to my supervisor doctor B.B. kasim who despite his commitments went through my research project and made many corrections. May Allah bless him abundantly. Ameen.

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My appreciation shall go to all my brothers and sisters who help me in one way or the other in the process of undergoing this programme.

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ABSTRACT

This study examine ministry policies and practices with particular references to ministry of finance Sokoto. Taking a critical look at the problems and solution at the ministry, training of staff on ICT and non-training of staff. An extensive review of existing literature was made covering issues like problems of using computers in the ministry. The ministry of finance Sokoto. Prudential guidelines was examine and it was observe that the guidelines succeeded in sanitizing by providing a good result and compelling them to report their tree position furthermore, discriminating activities was observed to contribute to the growing number of ICT problem. Some recommendation put forward for effective raining programme in particular and services in general include the need to properly educate ministry staff on the need for judicious utilization of ICT facilities and the danger inherent in their mis-use, the need for ministry to put in place sufficient laws that would check the abuse of ICT facilities.

CHAPTER ONE

1.0 Introduction

Information technology it is the technology which support activities involving the creation, storage, manipulation and communication of information together with related methods, management and application. Therefore information, technology may be seen as the broadly based technology needed to support information systems. Broadly speaking organization strives to achieve certain goal for the benefit of their owner or clients. These goals may be expressed in term of objective such as increasing revenues, increasing profit, avoiding costs, or improving services. Such objective will need to be met within various financial constraints, and within the limitation of available resources.

In order to reach its objective an organization must be able to plan ahead and control and coordinate its activities for these, it depends on the provision and communication of information. The information is likely to be use must effectively if it is seen as a sources needed to be exploited to the best advantage by the whole organization -and not just by its individual departments. The idea that "the whole can be more than

the sum of its part" lies behind this information system" view of organizations. Whether or not such view is taken, the requirement of providing and communicating information remains. These requirements are met, at least in part by the "Data processing system" within the organizations. Data processing (DP) is the technique of gathering, processing, storing and producing as well as manipulation of data to produce meaningful information.

IT management is the discipline whereby all of the information technology resources of a firm are managed in accordance with its needs and priorities. These resources may include tangible investments like computer hardware, software, data, networks and data centre facilities, as well as the staff who are hired to maintain them. Managing this responsibility within a company entails many of the basic management functions, like budgeting, staffing, change management and organizing and controlling, along with other aspects that are unique to technology, like software design, network planning, tech support, etc. information technology, that assortment of technology that enables the conversion of data into information, has had an enormous impact in public organizations and its theoretical foundations. One of the primary impacts

of information technology on public organization is the development of systems theory and its descendants including the study of complex systems, chaos, and complexity theory. Computer capability has enormously advanced the theoretical underpinnings of public organization.

The project title “Role of information technology in public management process with particular reference to Sokoto State Ministry of Finance”. Is compendium of the role of the ministry in managing the state funds and the development of the state. The research will discuss the role of information technology and its impacts to the people

1.1 Background of the Study

Information and communication technology is the process of managing the resources of a firm in accordance with its needs and priorities. These resources may include tangible investments like computer hardware, software, data, networks and data centre facilities, as well as the staff who are hired to maintain them. Managing this responsibility within a company entails many of the basic management functions, like budgeting, staffing, change management, and organizing

and controlling, along with other aspects that are unique to technology, like software design, network planning, tech support etc

One of the primary impacts of information technology on public organizations the development of systems theory and its descendants including the study of complex systems, chaos, and complexity theory. Computer capability has enormously advanced the theoretical underpinnings of public organization. Information technology also shapes organizations. For instance, one empirical study shows that the deployment of information associated with a decrease in the size of middle management Policies and regulations shape the land scope of information technology use in government.

From an organizational standpoint, the information age is in full swing and both public and private institutions are experiencing an increase in the use of a variety of information technologies (ITs). Realistically, it has become nearly impossible for an organization to operate without the use of one or more ITs. The implementation and subsequent use of ITs is a process of interrelated steps. Faltering or mis-stepping at any of the implementation stages may actually increase inefficiency, ineffectiveness, and promote any number of additional uncertainties. It is only through careful design, planning, acquisition, and

implementation of ITs that we may benefit from more effective operations and solutions to problems. While ITs are not the instant cure-all that many view them to be they are certainly an asset and can provide a number of advantageous and effective solutions if properly adopted. The successful implementation of ITs in any organization depends on a multitude of important and interrelated factors.

The civil service is the bedrock of the executive arm of government. Its main tasks came to be the implementation and execution of the policies decided on by the legislature or those appointed by the legislature to carry on the executive work of government. The Sokoto State Ministry of Finance is the instrument/machinery use by the government for generating revenue for the government, preparation of annual general budget and for controlling and managing government revenue. The ministry is headed by the honorable commissioner as the chief executive and it is segregated into different departments where each department is headed by a director. The roles and responsibilities of each department is unique and different from the other.

1.2 Statement of the Research Problem:

At one time or the other both federal and state as well as private organization had taken a giant strive action to adopt and maintain the use of information technology in the various set of organizations with a view to enhance effective running of Management/administrative process. To this end, some organization has provided with computers and their staff had under gone developmental training on computer studies. However, it discovers that some of these organizations have abandoned the uses of computer. The management process in the ministry of finance can be blames on many factors. Some which are as follows:

1. Inadequate trained personnel: The ministry does not have sufficient trained personals to operate and handle computers. Most of the computer operators are not indigenes. They are employed on contract bases which affect their performance.
2. Favoritism/Godfathermism: Some of the staff are employed because of their relatives in government not because they are qualified to be employed and because of that they can do and on do. They came to work at will and leave at will.
3. Inadequate funds to acquire modern computers, the present computers used in the ministry are out dated computers. They

were purchased more than ten years ago, the need has arise to purchase the modern once but the government did not do that due to inadequate funds.

4. Problem of power supply: The instability of power supply by NEPA affected the operations and maintenance of the computers by the staff.
5. Lack of political will on part of the government to strictly ensure computerization of management of finances. All management of finances are not fully computerized because he government officials are not interesting in doing that.

This research project attempts to examining the role of information technology in public management process and identify some various measures to such effect so that there should be efficient, effective, accountable, transparent and judicial control in the management of public funds by the ministry.

1.3 Objectives of the Study:

The main objective of this research is to assess importance of information technology in effective management process in organizations with specific reference to Ministry of Finance Sokoto. Also to bring out what information technology is all about and the roles

and function of Ministry of Finance Sokoto. It is also among the objective of the research to highlight that factors militating against the uses of computer technology in a public organization.

1.4 Hypotheses:

The following hypotheses are to be tasted for the purpose of this study.

H_1 There is effective and efficient administrative output

H_0 There is no effective and efficient administrative output using information technology

H_1 There is more accountability, transparency and judicial control of public funds using computers

H_0 There shall be a lot of problems in accountability, transparency and judicial control of public funds using computers

H_1 The greater utilization of information technology by the organization, the more effective management process

H_0 Utilization of information technology by the organization brings more problems in the management process

1.5 Significance of the Research

It serve as a guide on how to improve the use of computer information in various public and private organization. It serve as a reference to students undergoing learning programmes in public

management, accounting economics etc in various tertiary institutions in Nigeria.

The research will also be very useful to the staff of MOF Sokoto on how they shall perform their duties and responsibilities effectively. It will provide the full information about the ministry to the interesting persons. It is expected to prove useful to practicing administrators and those who are interested to know about information technology.

1.6 Scope and Limitations of the Study

The new civil service reform introduced by the federal government is for implementation throughout Nigeria, but this research work is limited to only Sokoto State Ministry of Finance. The researcher encountered a number of limitations during the research work that include time. The research has limited time to carry out investigation and get needed information. Most of the needed information was unable to be obtained on time due to uncooperative attitude of the top management in charge of ministry files and records. The researcher is constraint from having direct access to the management level to derive information in term of interview which will be very useful to research work. But I am very grateful to the public relation officer of the ministry for giving me maximum cooperation in the conduct of this research work. Most public

organizations especially Sokoto State Ministry of finance given absolute need to the law of secrecy because it deals with financial management of the state, which obstructs or hampers the researcher from obtaining necessary and accurate stability data.

1.7 Definition of Terms:

a) **Information Technology (IT):** is the study or use of electronic equipment, especially computer, for storing analyzing and sending out information. In another word, it supports the activities involving the creation, storage, manipulation and communication of information, together with their related method, management and application

b. **Administration** – The simplest and shortest definition of administration is the one which says that "when two men cooperate to roll a store that neither could move alone, the rudiments of administration have appeared. It is the administration and direction of persons in order to accomplish a specific ends.

3. Management: It is the effective and efficient utilization of organizational resources to achieve predetermined goals

4. Public Management: the term public management is commonly used to refer to both the activities concerned with the management of government business and the study of these activities.

5. E. Governance – is the application of information and communication technologies (ICTS) to the process of government functioning to accomplish simply, accountable speedy, responsive and transparent governance

1.8 Chapter Scheme

This research project to the department of management studies is made up of five chapters.

In chapter one, the researcher gives a general introduction, to the study, statement of problem, objectives of the study, significance of the study, Hypothesis, scope and limitation and chapter scheme.

Chapter two consists of the literature review and theoretical framework of the research work. While chapter three also consist of research design, population and sample, sampling techniques, types of sources of data, data analysis techniques testing of hypothesis techniques.

Chapter four also consists of introduction, data collection, data analysis, hypothesis testing and summary of findings.

In chapter five ITs consist of summary conclusion and recommendation.

CHAPTER TWO

2.0 Literature Review

The application of a computer system is the purpose for which the computer is used .e.g. keeping records. There are routine application, non-routine and specialist applications. Routine applications are those which an organization would normally wish to load to computer.

Having installed a computer system it is important to use it effectively. It is also essential, to ensure that the 'electronic system is efficient or if possible more efficient, that the existing manual or mechanical system. At first .sight it may seem that these criteria are the responsibility of the computer department staff. This is true but they are not solely responsible. The effective application of a computer system depends on each person who is concerned at any point from the completion of the first document or giving of the instruction to the person who will use the output in whatever form it may be.

The data which computers process has to come from somewhere, so there must be people at the put end of the system. The computer itself has to be instructed to carry out the various types of processing. So there have to be people to design the systems, write the programs and operate the machines. These are called computer operators.

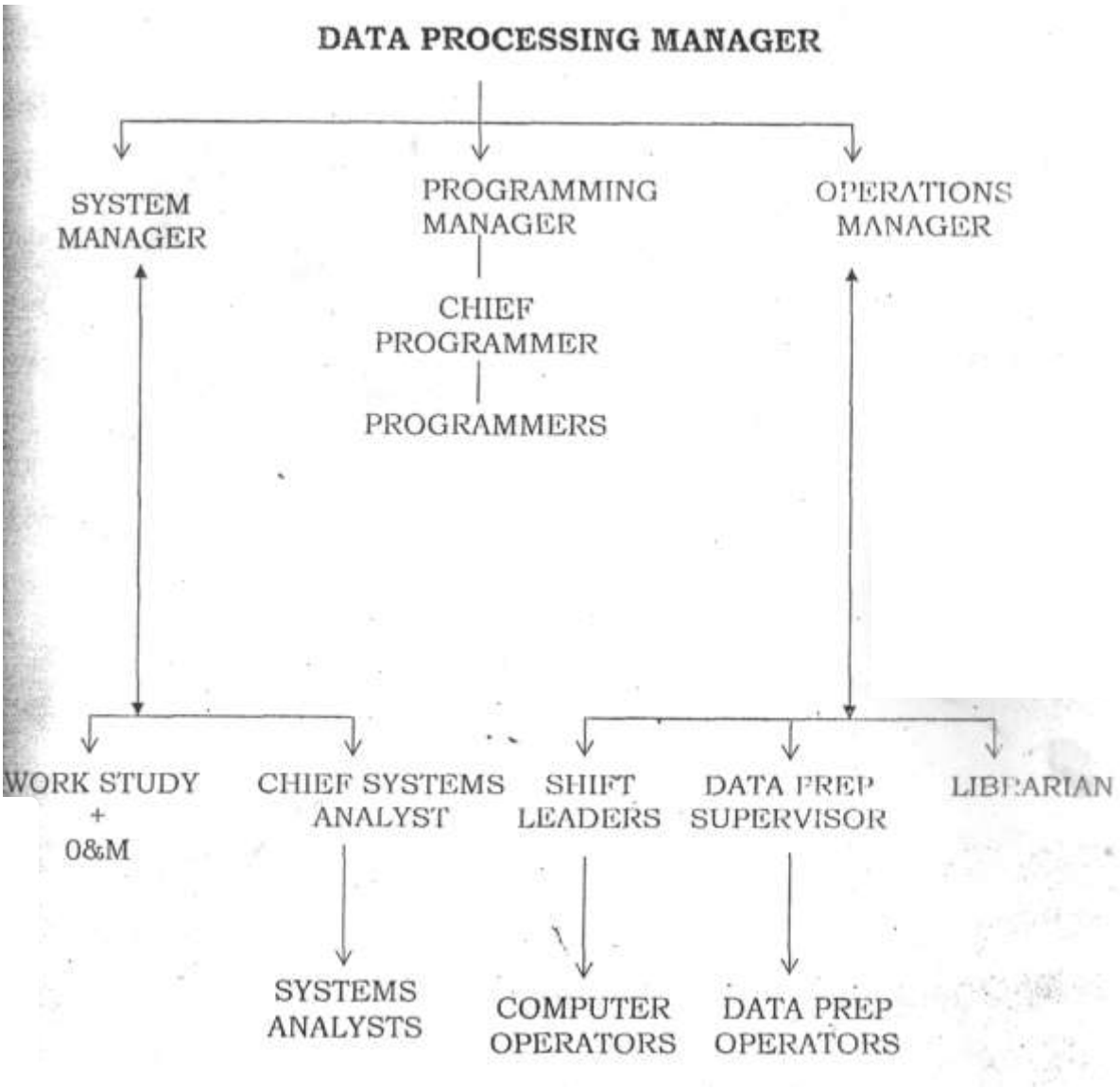
There are three main categories of computer staff, namely

1. system analysts,
2. programmer and
3. Operators.

Depending on the size of the organization there may be several of each category with a chief or senior manager. Computer department can vary in size from two people to several hundred. A Specimen DP department is shown in the organization chart; below fig. 1. An alternative organization structure based on project development, usually more appropriate to a large *DP* department, is shown at fig. 1.

The computer manager is in overall control of the department. His role is to ensure that an. efficient and cost effective service is provided to the organization. This means close liaison with senior management, strict control of projects for taking on new systems applications and monitoring of performance to ensure that faults are dealt with promptly.

The system analyst takes a broad view and look at. the overall system from input, through the computer processing, to The output.



Source: Management. Information System

2.1 Evaluation of Computer

History of computer could be traced back to the effort of man to count large numbers. This process of counting of large numbers generated various systems of numeration, Greek system of numeration,

Roman system of numeration and Indian system numeration. Out of 'these the India system of numeration has been accepted universally. H; is the basis of modern decimal system of numeration (0,1,2,3,4,5,6,7,8,9). Later you will know how the computer solves all calculations based on decimal system. But you will be surprised to know that the computer does not understand the decimal system and used binary system of numeration for processing.

(i) Calculating Machine:

It took over generation, for early man to build mechanical devices for counting large numbers. The first calculating device called" ABACUS was developed *by* the Egyptian and Chinese people.

The word ABACUS means calculating board. It consisted of stick in horizontal position on which were inserted set of pebbles. It has a numbers of horizontal bars each having ten beads. Horizontal bar represent units ten hundreds e.t.c.

ii. Napier Bones:

English mathematician John Napier a mechanical device for the purpose of multiplication in 1617 AD. The device was known as Napier's bones.

(iii) **Slide Rule:**

English mathematician Edmund counter developed the slide rule. This machine could perform operation like addition, subtraction, multiplication and division. It was wisely user! in Europe in 16th century.

(iv) **Pascal Adding and Subtraction Machine:**

You might have heard the name of Blaisc Pascal. He developed a machine at the age of 19 that could add and subtract. The machine consisted of .wheels gears and cylinders.

(v) Leibniz's Multiplication and Dividing Machine:

The German philosopher and mathematician Gottfried Leibniz build around 1673 a mechanical device that could both multiply and divided.

(vi) **Babbage's Analytical Engine:**

It was in the year 1823 that a famous English man Charles Babbage builds a mechanical machine to do complex mathematical calculation. It was called different engine. Letter, he developed general purpose calculating machine called, analytical engine. You should know that Charles Babbage is called the father of computer.

(vii) **Mechanical and Electronic Calculator:**

In the begging of 19th century the mechanical calculator was developed to perform all sorts of mathematical calculations-. Up to the 1960s it was

widely used. Later the rotating part of mechanical calculator was replaced by electric motor. So it was called electrical calculator.

(viii) **Modern Electric Calculator:**

The electronic calculator used in 1960s was run with electronic tubes, which was quite bulky. Later it was replace with transistors and as result the size of calculator become too small.

The modern electronic calculator can compute all kind of mathematical computations and mathematical functions. It can also be used to store some data permanently, Calculators have inbuilt programs to perform some complicated calculations.

(B) Computer Generation

You know that the evolution of computer started from 16^{th} century and resulted in the form that we see today. The present day computer, however, has also undergone rapid change during the last fifty years. This period, during the evaluation of computer took place, can be divided into live district phases known as generation, of computers. Each phase is distinguished from others on the basis of the type of switching circuits used.

(i) First Generation Computers:

First generation computer used thermion values. These computers were large in size and writing programs on them was difficult some of the computers of this generation were:

(a) **ENIAC:** It was the first electronic computer built in 1946 at university of Pennsylvania, USA by John Eckert and John Mauchy. It was named Electronic Numerical Integrator and Calculator (ENIAC). The ENIAC was 30x50 feet long, weighed 30 tons, contained 18,000 vacuum tubes 70,100 registers, 10,000 capacitors and required 150,000 watt of electricity. Today your favorite computer is many times as powerful a ENIAC, still size is very small.

(b) **EDVAC:** It stands for Electronic Discrete Variable Automatic computer and was developed in 1950. The concept of storing data and instructions inside the computer was introduced here. This allowed much faster operation since the computer had rapid access to both data and instructions; The other advantage of storing instruction was that computer could do logical decision internally.

(c) EDSAC: It stands for Electronic Delay Storage Automatic Computer and was developed by M.V. Wilkes at Cambridge University in 1949.

(d) **UNIVAC-1:** Ecker and Mauchy produced it in 1951 by Universal Accounting Computer setup.

(ii) Second Generation Computers:

Around 1955 a devices called transistor replaced the bulky electric tubes in the first generation computer. Transistors are small than electric tubes and have higher operating speed." They have no filament and require no heating. Manufacturing cost as also very low. Thus the size of the computer got reduced considerably.

It is in the second generation that the concept of central processing unit (CPU), memory, programming language and input and output units were developed. The, program: ling languages such as COBOL, FORTRAN were developed during this period. Some of the computers of the second generation were:

1. **IBM 1620:** It size was smaller as compared to first generation computers and mostly used for scientific purpose.
2. **IBM 1401**: It size was small to medium and used for business application

3. CDC 3600: It size is large and is used for scientific purpose

(iii) **Third Generation Computers:**

The third generation computers were introduced in 1964. They used integrated circuits (ICs). These ICs. are popularly known as chips. A single 1C has many transistors, registers and capacitors built on a single thin slice of silicon. So it is quite obvious that the size of the computer got further reduced. Some of the computers developed during this period were IBM 360, ICI-1900, IBM-370, and VAX-750. Higher level language such as BASIC (Beginners All Purpose Symbolic Instruction Code). Was developed during this period.

Computers of these generation were small in size, low cost, large memory and processing speed is very high.

(iv) **Fourth Generation Computers:**

The present day computers that you see today are the fourth generation computers that started around 1975 it used large scale integrated circuits (LSIC) built on a single silicon chip called microprocessor it is possible to place computer's central processing unit (CPU) on single chip. These computers are called microcomputers; later very large scale integrated circuits (VLSIC) replace LSICs.

Thus the computer which was occupying a very large' room in earlier days can now replaced on a table. The personal computer (PC) that you see in your school is a fourth generation computer.

(v) **Fifth Generation Computers:**

The computers of 1990s are said to be fifth generation computers. The -speed is extremely high in fifth generation computer. Apart from this can perform parallel processing, the concept of artificial intelligence has been introduced to allow the computer to take its own decision. It is still in a developmental stage.

2.2 Types of Computers

A. Computer Classification by generations

This first electronic computers were produced in the 1940s, since then a series of radical breakthroughs in electronic has occurred. With each major breakthrough the computers based upon the older form of electronic have been replaced by a new “generation" are classified as follows:

a. First Generation. Early computers using electronic valves. (1940s)

b. Second Generation. More reliable computers using transistors which replaced the first generation (;1950)i

c. Third Generation. More powerful, reliable and compact computers using simple integrated circuits (1960s and earth 1970s)

d. Fourth Generation. The computers in used today and which contain more sophisticated micro-electronic devices.

e. Fifth Generation. There many prediction that by the end of this century computers will have been developed which will be able to converse with people in a human-like manner and which will be able to mimic human senses, manual skill intelligence. The term "fifth Generation" is often used to describe such computers.

B. Computer classification by size

Mainframe, minicomputer and microcomputer.

The following classification is in other of decreasing power and size. However, there are two sharp dividing lines in that, for example, a model at the top of manufacturer's range of computers might well be more powerful than the model at the bottom of a range of mainframes.

1. Mainframes. Large general-purpose computers with extensive processing, storage and input/output capabilities. Conventional large scale Data Processing has traditionally been carried out on

these machines. The market for these computers is dominated by IBM.

2. Microcomputers. Physically smaller computers compared with mainframes. They are used for special purposes or smaller scale general purpose work Conventional medium scale Data Processing has traditionally been carried out on these machines. Examples art DEC'S VAX range, and IBM's AS400 range.
3. Microcomputers. These represent a further step in miniaturization in which the various integrated circuits called and elements of a computer are replaced by a single integrated circuit called “chip”. Their continuing and rapid technological development have had a major effect on the whole computer industry over the past twenty years or so. Examples are he IBM PS/2/PCS Apple Macintoshes, DELLS, Amstrads and COMPAQ

2.3 Characteristics of Computer

Let us identify the major characteristics of computer. These can be discussed under the headings of speed,: accuracy, diligence, versatility and memory.

1. Speed

As you know computer can work very fast. It takes only few seconds for calculations that we take hours to complete. Suppose you are asked to calculate the average monthly income of one thousand persons in your neighborhood. For this you have to add income from all sources for all persons ion a day to day basis and find out the average for each one of them. How long will it take for you to do this? One day, two days or one week? Do you know your small computer can finish this work in few seconds? The weather forecasting that you sec every day on TV is the results of compilation and analysis of huge amount of data on temperature, humidity, pressure, of various places on computers. It takes few minutes for the computer lo process this huge I Hint of data and give the result.

You will be surprised to know that computer can perform millions (1.000.000) of instructions even more per second. Therefore, we determine the speed of computer in terms of microsecond (10^{-6} part of a second) or nano-second (10^{-9} pan of a second). From this you can imagine how fast your computer performs work.

2. Accuracy

Suppose same one calculates faster but commits a lot of errors in computing. Such result is useless There is another aspect. Suppose you want to divide 15 by 7. You may work out up to 2 decimal places and say the dividend is 2.14. I may calculate up to 4 decimal places and say that the result is 2.1428. Someone else may go up to 9 decimal places and say the result is 2.142857143. Hence, in addition to speed, the computer should have accuracy or correctness in computing.

The degree of accuracy of computer is very high and every calculation is performed with the accuracy. The accuracy level is determined on the basis of design of" computer. The errors in computer are due to human and inaccurate data.

3. Diligence

A computer is free from tiredness, lack of concentration, fatigue. etc. It can work for hours without creating any error. If millions of calculations are to be performed, a computer will perform every calculation with the same accuracy. Due to this capability it overpowers human being in routine type of work.

4. **Versatility**

It means the capacity to perform, completely different type of work. You may use your computer to prepare payroll Slips. Next moment you may use it for inventory management or to prepare electric bills.

5. **Power of Remembering**

Computer has the power of storing: any amount of information or data. Any information can be stored and recalled as long as you require it, for any numbers of years. It depends entirely upon you how much data you want to store in a computer and when to lose or retrieve these data.

6. **No IQ**

   Computer is a dumb machine and it cannot do any work without instruction from the user. It performs the instructions at tremendous speed and with accuracy. It is you to decide what you want to do and in what sequence. So a computer cannot take its own decision as you can

7. **No feeling**

   It does not have feelings or emotion, taste, knowledge and experience. Thus it does not get tried even after long hours of work. It does not distinguish between users. It does not get angry.

8. Storage

The computer has an in built memory where it can store a large amount of data. You can also store data in secondary storage devices such s floppies, which can be kept outside your computer and can be carried to other computers.

2.4 Software and Hardware

Software is the general term used to describe all the various programs that may be used .in a computer system together with their associated documentation. Programmes are the instructions that tell computer how to process data into the form you want.

Types of software. The two main classes arc as follows.

i. Application software. This is software that is designed to be put to specific practical use. This broad classification may be further sub-divided into:

(a) Specialist application software, that is. programs, with associated documentation, designed specifically to carry out particular tasks, for example, solving sets of mathematical equation or controlling a company's stock of goods.

(b) Applications packages, that is. suites of programs, with associated documentation, used for a particular type of problem.

Many packages are designed in such away that they can be used for a variety of similar problems. For example, payroll packages are sometimes produced in forms that enable them to be set up and used by different companies each having slightly different ways in which they need to produce their payroll. The most abundant selection of packages is available on personal computers, with the more popular packages selling in tens of thousands of copies or even hundreds of thousands of copies.

ii. System software. These are programs, with associated documentation, that control the way the computer operates or provide facilities that extend the general capabilities of the system. Within the set of systems software for a given computer there is usually a program, or suite of programs, called the operating system. The operating system controls the performance of the computer by doing a variety of jobs to ensure the proper, orderly and efficient use of hardware by applications programs. Most applications programs can only work when used in conjunction with the operating system. Other systems software may extend the capabilities of the operating system further, for example, by providing programs that

can monitor how efficiently the hardware is being utilised by the software.

Hardware

Hardware is the name given to all the physical devices found in a computer system. Whether looking at a small computer on a desktop or at a large computer in the computer room, where the devices look like large, inert metal cabinets, there is little visible evidence of the phenomenal speeds at which data is being processed within. It is the programs which put life into the hardware.

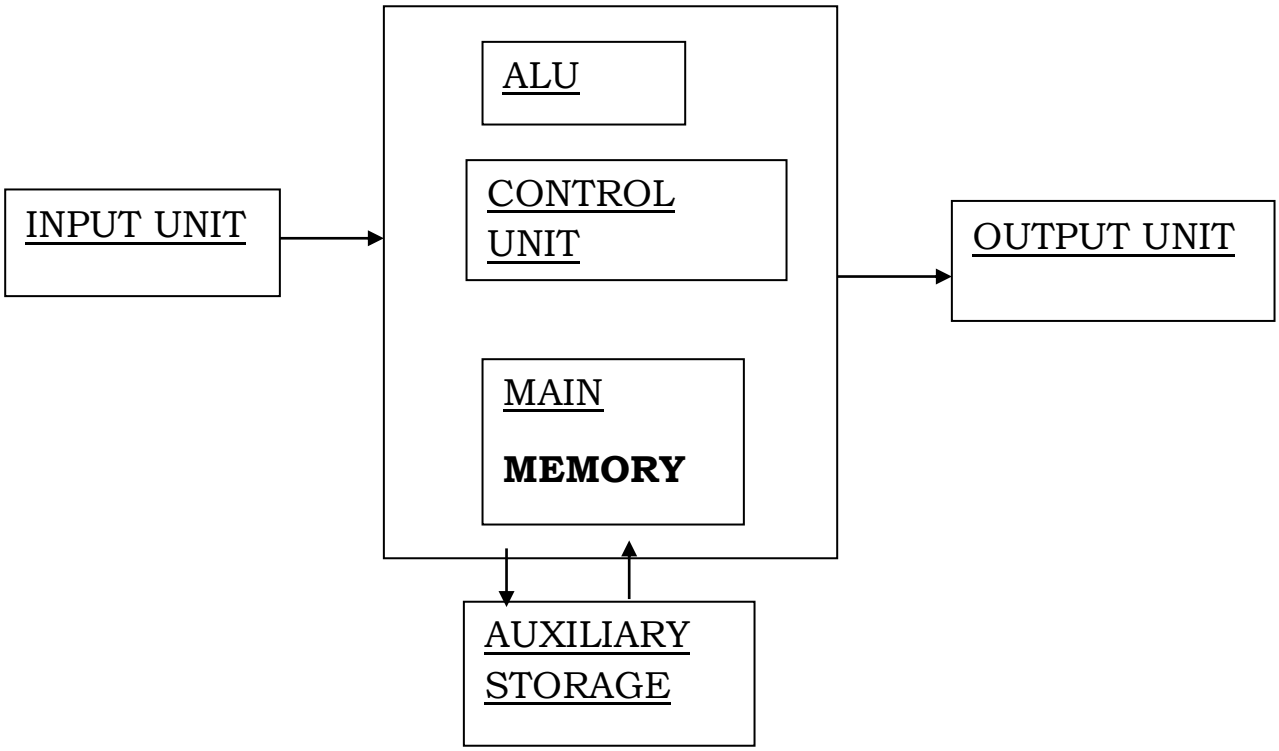
Key Functions of a Personal Computer

Before looking at specific PC components, it is worth taking a few moments to consider the motions that are performed by a computer:

- Input- Entry of raw data; for example, typing names and addresses on a keyboard or transmitting a picture from a digital camera
- Processing- Manipulation of the raw data to produce useful information. Purpose of a computer for example, sorting or indexing the names and address adding effects to the picture.
- Output - Transformation of the data into information, perhaps in a non-computerized format; for example, printing mailing labels from a database or displaying the picture in a brochure

- Storage:- Retention of the data until it is needed: for example, filing names and addresses in a database or archiving the picture in an online library. With a basic understanding of these key functions, the role of each of the components of a PC becomes much clearer.

THE COMPUTER HARDWARE SYSTEM



Source: Management Information System

The diagram above is a simple illustration *of* the computer hardware system. It can also be regarded as the diagrammatic representation of the flow of data/information between t HIS parts that make up the computer system.

FUNCTIONAL UNITS

In order to carry out the operations mentioned in the previous section the computer allocates the task between its various functional units. The computer system is divided into three separate units for its operation. They are 1) arithmetic logical unit. 2) control unit, and 3) central processing unit.

Arithmetic Logical Unit (ALU)

After you enter data through the input device it is stored in the primary storage unit. Arithmetic Logical Unit performs the actual processing of the data and instruction. The major operations performed by the ALU are addition, subtraction, multiplication, division, logic and comparism. Data is transferred to ALU from storage unit when required. After processing the output is returned back to storage unit for further processing or getting stored. Control Unit (CU)

The next component of computer is the Control Unit, which acts like the supervisor seeing that things are done in proper fashion. The control unit determines the sequence in which computer programs and instructions are executed. Things like processing of programs stored in the main memory, interpretation of the instructions and issuing of signals for other units of the computer to execute them. It also acts as a switchboard

operator when several users access the computer simultaneously. Thereby it coordinates the activities of computer's peripheral equipment as they perform the input and output. Therefore it is the manage of all operations mentioned in the previous section.

Central Processing Unit (CPU)

The ALU and the CU of a computer system are jointly known as the central processing unit may call CPU as the brain of any computer system. It is just like brain that takes all major decisions, makes all sorts of calculations and directs different parts of the computer functions by activating and controlling the operations.

Personal Computer Configuration

Now let us identify the physical components that make the computer work. These are

1. Central Processing Unit (CPU)
2. Computer Memory (RAM and ROM)
3. Data bus
4. Ports
5. Motherboard
6. Hard disk
7. Output Devices and

8. Input Devices

All these components are inter-connected for the personal computer to work.

2.5 Concept of Modern Information System

The back born of every management process or activities would be impossible without information. Ruther (1977) said "information management is the power tool for understanding of action". Management must first try to determine what should take place? This raise two question what are the objective and the best way of achieving, them. With the limited resources at hand, information is use in planning stage for sales, statistics and analysis determination of material requirement, cash flow, and investment appraisals, that information is needed for this process of determining the end and seeks the best means of achieving the objectives.

Information is likely to be used most effectively if it is seen as resource which needs to be exploited to the best advantage by the whole organization and not just *by* its individual departments. The idea that the whole can be more than the sum of its part lies behind this information system's view of organizations. Whether or not such a view is taker the

requirement of providing and communication remains. And in order to reach its objective, an organization must be able to plan ahead and control and coordinate its activities. And this depends on the provision and communication of information According to Thomson (1986) information system is the "total apparatus for handling information within the organization in all respect". It is a situation where an organization is being considered, as a whole with respect to its information requirements and information utilization.

An organization with natural memory, sources of information come and go and the information which have been provided may be too costly untimely, integrated and concise with available in format. Success of firm (large or small) depends on the- correctness and accurate decision by management of the organization. Past decision have produced today's situation and today's decision will determine the feature of the organization.

According to VASONYIA and Richard (1980) "success of the organization depends on the wisdom of the management decision and those decision will only be as good as management information on which they are based". For management to have accurate detailed and

relevant information, it is difficult or almost impossible for management to relay on personal observations and traditional information system.

Information technology may be seen as the broadly based technology needed to support information system. And these requirements are met at least in part by the data processing system within the organization

Data: are raw facts and figures about people, machine places, and so on. These data are unprocessed and as a result does not allow decision making.

Characteristics of a data

1. Data is good when it has meaning
2. Data is good when it is transferable
3. Data is good when it is understandable
4. Data is good when it is relevance/worthiness
5. Data is good when it has completeness

Information: these are processed data or results from logical manipulation of data which allow decision making

Process: there are arithmetic and logical operations; involved in transforming meaningless data to meaningful and also useful information i.e. addition, subraction, division, comparison etc.

DATA PROCESSING

Data processing refers to the techniques of gathering, processing, storing and producing as well as disseminating information relating to the physical events in the business. Where as a business processes raw materials to produce goods and services, a data processing system processes basic data about the raw materials and the production processes to produces basic business documents for management to keep them informed of events within the business.

There is various method of processing data to obtained information. These include direct job entry, remote job entry, and batch processing and front end processing.

Direct job entry means that the information is being led into the computer from a peripheral device located within the computer area.

Remote job entry means that information is being fed into the computer from a remote location e.g. a video terminal sailed in another room, building or location.

Front end processing means that data, is accepted, processed and store by a computer, usually a mini or micro and is than transmitted to a mainframe computer for updating of-master files. The minicomputer serves as interim storage.

Batch processing means that data is stored up into batches either until there is a specific quantity or covering a specific period, It can then be processed in one operation or example; a day's stock issues and receipt may be recorded manually on forms. The form arcs then sent to the computer department in a batch were the stock record files held on computer are updated in one processing. Bank transactions are dealt with in the same way. The day's transactions at the branches are processed overnight at the bank's computer centre so that the branch can tell a client the state of his account as at close of business the previous day.

2.6 Impact of Information Technology on Public Administration

Some events, when take place, have epoch-making consequences in the world. It happened in the 15th and 16th centuries which resulted in the exploration and opening up of this planet. Industrial revolution also had similar consequences. It ended the feudal, rural based localized socio-economic system and ushered into industrial, urban, capitalist nation-state system enabling the expansion of trade and commerce at hitherto unprecedented level. Similar event has taken place in the second half of the 20th and the beginning of the 21st centuries. It is the greatest revaluation described as the technological revolution based on two core

technology the computer technology and the communication Technology, generally referred to as the Information and Communication.

Technologies (ICT).

R.S. Dwivedi (1978) uses the term MIS (Management Information Systems) because according to him, when information technology is applied to the communication process In organizations, the term MIS is commonly used.

MIS is commonly related to integrated networks of Information for supporting management decision making. It is also used for strategic planning and improved customer service. MIS is concerned with telecommunications explosion. It has removed the borders between computing and communicating. In fact, the telephone, television and computer have emerged as powerful user-friendly communication system.

E-Mail (Electronic Mall) uses electronic circuitry to transmit written messages to various computer terminals instantaneously. Today, people use the internet to obtain information. E-mails are also used for transferring computer files and electronic data interchange.

The Internet is the most important communication tool the world has seen so far. The breathtaking. Pace of technological change is transforming every Institution. Human knowledge is doubling every seven to ten years. Communication is now nearly instantaneous. These changes are causing staggering upheaval in the familiar, systems including governance.

2.7 Advantage of Information Technology

Information technology has several advantages for organizations including governments. It enables people. It enables people in the organization to handle information more quickly and effectively. It is cost effective and prompt and a surer way of reaching people. It has revolutionized the way the organizations work. It has flattened the hierarchical structure of organizations by providing easy communication link amongst all employees. It has also improved level of accountability among people in organizations because they are linked through Internet connections and no employee can find excuse that such and such Information Is not available. E-mail has speeded up communication within and without the organizations. It has helped increase productivity and save costs.

2.8 E-Governance

E-Governance (Electronic Governance) is the application of Information and Communication Technologies (ICTs) to the processes of government functioning to accomplish simple, accountable, speedy, responsive and transparent governance. It is not simply automating the government's current ways of doing work. With the new tools of a networked society, government must completely rethink and re-engineer itself. E-government is not merely computerizing existing government. It is transforming the existing government. E-governance is the ICT-enabled route to achieving good governance. It Integrates people, processes, information and technology for meeting goals of the government. The goals of the E-government are to make' it easy for citizens to obtain service. To have easy interaction with the government at different levels to improve efficiency and effectiveness in government functioning, and to improve responsiveness of the government to the citizens.

Often the question is asked why the governments should use information technologies? The answer is simple. The people are by now familiar with the working of private sector organizations using Information technologies and compare their services with those of the

government. They realize that the government is too costly, too inefficient, too Ineffective and too Insular. To know the bullying tactics of the bureaucrats, their corrupt ways and their indifference. They are No longer willing to tolerate delays caused by excessively time consuming difficult procedures. They want solution to their problems right here, right now. G. Vljaya Raghavan and V.S.M. Nair (1980) remark, "Few, if any, developments in the modern history of public administration and government have been as heralded as the coming of electronic government. Information and knowledge are the lynchpins of successful E-governments. In fact, no aspect of ICTs touches so many as profoundly as does E-G."

2.9 Advantages of E-.Governance

There are several potential benefits of electronic Administration. It can be an Instrument to reduce poverty and spur sustainable development. It can foster democracy, efficiency and transparency. It provides better services for its citizens by providing competition and innovation. It enables the governments to reduce geographical and language, barriers. It facilitates timely delivery of services. It integrates processes and functions to achieve efficiencies and cost reduction. It anywhere any time. In developing countries like India, It provides

opportunities to leapfrog development by adopting best practices in governance. Broadly, its benefits can be divided into three categories: improving government processes; connecting citizens; and building relationships with and within civil societies.

The aspects of public administration which are affected by *E*-Governance are the delivery of services, decision-making, knowledge management, communication, human resources and financial management and regulations.

In countries where E-governance has been adopted, the benefits derived depend upon the extent of its application and the socio-economic environment of the country. In Chile, for example, first, it involved presentation of information on taxation rates, procedures and plans. Then it allowed citizens to check on the status of their tax returns to see if refunds were due or if the return was still being reviewed. The citizen are allowed to file tax returns online and to make subsequent online corrections. It has resulted in reduced costs, increased speed and improved accuracy of service. The new system is delivering online assessment in just 12 hours whereas earlier it used to take 25 working days. In Costa Rica, it enables the -citizens to get more information

about' government organizations and interact with them through the internet.

In Dominican Republic, the E-governance has been used to fight Corruption in civil services. The government website publishes the entry and exit assets of public officials, their bank account numbers and home addresses to help citizens detect possible fraudulent acts committed by them while in office. In Philippines, customs reform is *a* prominent example of the use of E-governance in government—public relations. Philippines Customs Bureau has developed an online system' to process clearance of Imports, payment of duty and delivery of release orders for shipments to leave the docks. This online system has lessened the cost of trade for businesses, reduced opportunities for fraud and helped the Bureau to maximize revenue collection. These examples are only illustrative and not exhaustive. What they indicate is the immense benefits which can result from the application of information technologies to public administration,

2.10 The Role of the Ministry of Finances

The Ministry of Finance is one of the Ministries in the State Civil Service mainly concerned with the Management of the Economy and disbursement of Government funds to all the Ministries, Departments

and Agencies in the State Civil Service. The Ministry is not a project executing Ministry. In other words, it is not directly executing Capital Projects as obtained in other Ministries.

However, the Ministry is the nerve centre and heart beat of all the projects executing Ministries, Departments and Agencies because it is the custodian of Government funds, and projects are being paid through the ministry.

Ministry of Finance is divided into two segments/Division Administration and Treasury, Stores Control Unit and Permanent Board of Survey *ire* under the Administrative Section of the Ministry under the Permanent Secretary, while on the other hand, Board of Internal Revenue and Sub-Treasury are under the office of the Accountant General. The, the Ministry is saddled with the following responsibilities among other things as follows: -

(i) The Ministry advises the State Government on the formulation of all Public Financial policies, Programmes and activities in the State,

(ii) The Ministry is also saddled with the responsibility of plementing all Public Financial Policies as approved by the State Government

(iii) The Ministry also undertakes periodical evaluation of the implemented Public Financial Policies by the State Government

(iv) The Ministry is also responsible for the release and disbursement funds to the projects executing Ministries, Departments and Agencies in the State Civil Service for the execution of Capital Development projects in the State, based on the approval of the State Executive Governor. ,

(v) The Ministry is also in charge of Preparing print outs for the Monthly Salaries of the State Civil Servants,

(vi) The Ministry also advises the State Government on Tax and Taxation, Stores Control, Public Accounts, Lending and Borrowing (Internally and Externally) grants and subventions to all VIDA'S in the State Civil Service and Charitable organizations.

DEPARTMENTS

For smooth and effective implementation of the Statutory activities, the Ministry operates under the following Departments

(i) Administrative Department

(ii) Central Account Department

(iii) Internal Control Department

(iv) Expenditure Department

(v) Finance Incorporated Department

(vi) Main Account Department?

(vii) Stores Control Unit

(viii) Planning, Research and Statistics

(ix) Debt Management Department

PARASTATALS UNDER THE MINISTRY

(i) **Board Of Internal Revenue,** is one of the Parastatals of the Ministry in charge of collection of Tax and Taxation and all internally Generated Revenue in the State.

(ii) **Permanent Board of Survey,** is another Parastatal of our Ministry in charge of Annual Stock Taking, Verification of all Article and Goods purchased with Government funds, Annual Checking of the Accounts of Government, Ministries,

Department and Agencies including Government Sub-Treasuries in the State, Conducting Board of Survey of all

Government Unserviceable Vehicles, Plant and other Materials. Disposal of all the Budget Items through the Public Auction Sales subject to the approval of the State Government.

iii) **Sub-Treasury,** is another Parastatal under the Ministry in charge of payment of Salaries, Cash allocation, other allowances, Feeding contract and Monthly Pension

STAFF STRENGTH

Ministry of Finance commands a pool of experienced, know-how Technical/Professional Accountants, Internal Auditors and Administrators assisting in the implementation of all Public Financial Policies as approved by the State Government. Thus, as at the Month of May 2015, the Ministry has a staff strength of Eight Hundred and Ninety **(890)** staff based on the following breakdown:

A. (i)GL 01-06= 250

(ii)GL 07-16= 640

Grand Total **890**

CHAPTER THREE

3.0 Research Methodology

This chapter deals with the general methodology employed in conducting this research. It specifically describes the research design, population of the study, sample and sampling techniques, instrumentation sources, methods off data collection and method of data analysis

3.1 Research Design:

The research design used for this study is the descriptive survey approach. The study was carried out in Sokoto state ministry of Finance Sokoto. The descriptive survey approach was chosen because the researcher intends to use manly questionnaires and interviews to collect data and it specifies who and what are to be measured (Oyer 1979).

3.2 Population of the Study

The population here means the group people the researcher is studying. Therefore, the population of this study are the entire staff of finance Sokoto State management, senior, junior staff (male and female) in the ministry of finance Sokoto.

3.3 Sample and Sampling Techniques

One hundred respondents were chosen for the study by sample random. Sampling method to make it possible for each person to have equal chance of being selected, out of which 100 were used for the study.

3.4 Instruments for Data Collection

In this study, questionnaires is used of the staff both senior and junior staff while interviews were used to collect data from the management staff and some principle officers of the ministry. Each questionnaire is divided into two parts (a and B), pat A contains personal data while part B contains data on the research questions raised with yes or No for responses and few comments where applicable. The interviewees were asked for both senior and junior staff based on relevant information.

3.5 Method of Data analysis

As a survey research, the data analysis was in frequency count so as to interpret the data, simple frequency and percentages were used since there are research questions of different responses and ideas. As mathematics students, the use of frequency table, tally cards and simple

percentages helped in the analysis, which provided answers to the research questions.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter would be concerned with the collection, presentation and analysis of data. This is aimed at testing the validity and reability of the data collected. The hypothesis stated in chapter one would also be tested in order to determine its validity.

The focus of this research would be on the ministry of finance Sokoto, which is the case study of this research. The analysis and interpretation of findings in this research would be based on the information obtained from the questionnaire.

4.2 Analysis and Findings of Data.

The analysis of data would cover such areas like the evaluation of computers, concept of modern and information system, E-payment etc. one hundred questionnaires were distributed tot eh staff of the ministry of finance and eighty of them were collected from the selected respondents who were chosen randomly. Percentage would be used in analyzing the data in order to enhance understanding and clarity. Chi-square (X2) analysis would be used in testing the hypothesis.

It is clear that the continued survival of any organization depends on its ability to respond effectively to the demands made upon it from both its interval and external environment. This therefore, cells for valid judgment of what the future would look like. This can only be achieved were concerted efforts are made to study past trends and asses present conditions in order to make valid projectstions into the future.

Table 4.1: Staff responses to whether there is computer unit is enough to serve the function of the ministry.

Response	Number of respondents	Percentage (%)
Yes	32	40%
No	40	60%
	80	100%

Source: Questionnaire 2015

From table 4.1, 40% responded yes and 60% responded No. senior staff were result is presented in table 4 below.

Table 4.2: Staff responses to whether there is need to create a computer department in the ministry

Response	Number of respondents	Percentage (%)
Yes	62	77%
No	18	22%
Total	80	100%

Source: Questionnaire 2015

From the table 4.2 it is clear stated that the 62% percent indicated that the ministry need to create a computer department while 18% responded No. hence the table show that there is need for the ministry to create computer department.

Table 4.3: Does the management staff use computers in record keeping

Response	Number of respondents	Percentage (%)
Yes	27	33.27%
No	53	66.75%
Total	80	100%

Source: Questionnaire 2015

From the table 4.3, 66.25% responded No and 33.27% responded yes. The management staff o the ministry were asked the same question.

Hence the result presented in the table and most of the management staff were not computer literate.

Table 4.4 Does the ministry need to recruit the additional computer staff

Response	Number of respondents	Percentage (%)
Yes	48	60%
No	32	40%
Total	80	100%

Source: Questionnaire 2015

There is no organization that can function effectively without adequate amount of human resources. The need for human resources is more pronounced in service ministry. the above table shows unit 60% of workers believe that the ministry need to recruit more staff to enhance its efficiency.

Table 4.5; Does the ministry trained their staff in computer programme.

Response	Number of respondents	Percentage (%)
Yes	62	77.5%
No	18	22%
Total	80	100%

Source: Questionnaire 2015

Computer are very essential tools in big ministry. The enhance the job efficiency and effectiveness and tend to make work more convenient for the worker. But most of all threaten the workers job. Because of their efficiency and their ability to process data and information and non micro seconds, the need for large number of human beings in the ministry become useless. The response as shown from the table may not be that surprising since most of the affected personal are educated and are aware of the benefit accruable to their from the implementation of such programme.

Table 4.6 Does the ministry have competent computer operators

Response	Number of respondents	Percentage (%)
Yes	62	77.5%
No	18	22%
Total	80	100%

Source: Questionnaire 2015

From the table 4.6 it show clearly that 77.5% responded yes and 77.5% responded No. as a sensitive ministry the must have a comportment computer because it control all the finance of the state.

Table 4.7: does the ministry posses enough computers.

Response	Number of respondents	Percentage (%)
Yes	21	26.25%
No	59	22%
Total	80	100%

Source: Questionnaire 2015

From the table 4.7 26.25% responded yes and 73.25% responded No. staff were also asked the same question. Therefore, the result is presented in table 4.7 below which show lack of adequate computer in the ministry

Table 4.8 which type of computers are in use in the ministry.

Response	Number of respondents	Percentage (%)
Old	18	22.5%
Wettest	62	77.5%
Total	80	100%

Source: Questionnaire 2015

From table 4.8 it is clearly stated that the staff indicated old representing 22.5% while 75.5% responded tested therefore, on eh basis of result from the table above, i.e. 4.8 we can deduce that the ministry is using the latest computer system.

Table 4.9: does e-payment receives public regard and recommendation

Response	Number of respondents	Percentage (%)
Yes	53	66.25%
No	27	33.75%
Total	80	100%

Source: Questionnaire 2015

From table 4.9, it is clear that 33.5% of the staff showed No and 66.25% indicated that the e-payment is regarded and recommended. Those who showed that the e-payment is not regarded and recommended were further asked to indicate of there are reasons for not regarding the e-payment in the ministry. Most of them stated that harshness and the attitude of ministry staff made them to lose interest.

Table 4.10: does the ministry have sufficient stand by generators.

Response	Number of respondents	Percentage (%)
Yes	20	25%
No	60	75%
Total	80	100%

Source: Questionnaire 2015

From table 4.10 it is clear that 75% of the staff indicated two while 35% indicated yes. Therefore, the result above shows that we can deduce that lack of adequate stand by generator.

Table 4.11: does e-payment solve the problem of Gost workers

Response	Number of respondents	Percentage (%)
Yes	53	66.25%
No	27	33.75%
Total	80	100%

Source: Questionnaire 2015

From the table 4.11, it shows that, the ministry make changes only when there is existing problem 66.20% responded yes and 33.75% responded No.

Table 4.12: DWICT enhance the management of public funds in Sokoto state

Response	Number of respondents	Percentage (%)
Yes	22	27.50%
No	56	72.5%
Total	80	100%

Source: Questionnaire 2015

From the table 4.12, it stated clear that 27.5% responded yes while 72.5% responded No. the result above shows that lack of competent staff can be a contributing factor to the ministry.

Table 4.13: did the introduction of computer usage brought improvement in the control of public funds in the state

Response	Number of respondents	Percentage (%)
Yes	51	76.25%
No	19	23.75%
Total	80	100%

Source: Questionnaire 2015

From the table 4.13, it is clear that response to control of public fund are to a large extent not meant for future that is adequate precautionary measures are put in place to avoid unforeseen circumstances this puts the ministry in a very tight condition whenever there is the occurrence of an in foreseeable situation. It weakens the ministry efficiency and productivity in a longer and may possibly collapse in he trend is not check. This would seriously impede on the effective performance of its statutory role.

Tale 4.14 does ICT enhance the desired relationships between the ministry and other ministries with regards to management public funds.

Response	Number of respondents	Percentage (%)
Yes	45	56.25%
No	35%	43.75%
Total	80	100%

Source: Questionnaire 2015

Healthy interpersonal enhance group cohesion and ministry productivity. The above table shows a moderate level of interpersonal relations. The 56% percent response representing 45 number of respondent, means that the number of those who think in this direction is higher but the gap is not wide enough to show a very high level of response improvement can still be made in this direction by organizing training programme that would enhance healthy relationship question 15 is what is your own view on question 14%

Answers: many respondents explained that the use of IC Tint eh management of public finds on line and improvement the working relationships between eh ministry and other ministries in the state.

4.3 Testing of Hypothesis

In chapter one of this research for hypothesis were formulated. In order to determine their validity, they shall be tested using the chi-square analysis.

$$X2 = e \frac{(01-ei)^2}{e1}$$

where Σ = sammatis

01 = observe frequency

e1 = expected frequency

The degree of freedom is equal to (d-1) (c-1) where

R = number of rows

c = number of columns

= is a constant variable

From this chi-square rule regarding the decision rule it is stated that where chi-square calculated (x2c) is greater than the chi-square tabulated. Reverse is the case when it is rejected.

Hypothesis one

It states that there is effective and efficient administrative out put. In order to test the hypothesis table 4 & 4.2 would be used which were derive from questionnaire.

01	Ei	O1-ei	(o1-ei)	(0i-ei)2 ei
53	40	13	169	4.23
27	40	-13	169	4.23
19	40	-21	441	11.03
51	40	21	441	11.03
				Xe2=30.52

Source: Questionnaire 2015

The five percent (5%) level of significance would be used and the degree of freedom= (c-1_ = 4-1=3 under the XC2 = 30.51 is greater than the X2-which is 7.815 then the hypothesis is duly accepted while the null hypothesis is rejected.

Hypothesis two

It states that there is no effective and efficient administrative out put using information technology

N order to test this hypothesis, table 4.3 and 4.4 would be used which were derived from equation 8 and 9 in questionnaire

01	ei	O1-ei	(o1-ei)	(0i-ei)2 ei
21	40	-19	361	9.03
59	40	19	361	9.03
48	40	8	64	16
32	40	-8	64	16
				Xe2=21.29

Source: Questionnaire 2015

The five percent (5%) level of significance would be used and the degree of freedom = (c-l) = 4-1-4 using the chi-square table (3) under 0.05-7.815 which gives the chi-square calculated.

Since the Xc2=21.29 is greater than the chi-square tabulated (Xc2) which is 7.815. he hypothesis is accepted.

Hypothesis three

It states that there is more accountability, transparency and judicial control of public funds using computers

In order to test these hypothesis table 4.6 would be used which is derived from questionnaire.

01	ei	O1-ei	(o1-ei)	(0i-ei)2 ei
20	40	-20	400	10
20	40	20	400	10
				Xc2=20

Source: Questionnaire 2015

The free percent level of significance would be used and the degree of freedom = (c-1_ = 2-1 = 1 using the chi-square table (one)1 number 0.05 = 3.341

Therefore the X2 = 3841

Where the Xc2 = 20

In this case the chi=square calculated and thus the hypothesis is accepted

Hypothesis four

It states that there shall be a lot of problems in accountability transparency and indicated control of public funds using computers.

In order to test this hypothesis table 4.5 would be used, which is derived from questionnaire twelve (1`2) in the questionnaire

01	ei	O1-ei	(o1-ei)	(0i-ei)2 ei
62	40	22	484	121
18	40	-22	484	121
				Xc2=24.2

Source: Questionnaire 2015

The five percent level of significance would be used and the degree of freedom = (c-1) = 2-1=1 using the chi-square table (one), under 0.05 = 3.841 which gives the chi-square tabulated, while the ci square tabulated is 24.2.

In this case the chi-square calculated is greater than the chi-square tabulated and thus the hypothesis is accepted.

4.4 Summary of Finding

Based on the findings in this study we have seen how the discriminatory procedure employed by ministry of function leads to the growing, number of information technology in public management

We have also seen how the insistence of the provision of computers to staff for training.

It has also been observed that the ministry officials are not doing much to educate their staff on he real terms and conditions governing the use of computer. Staff are not adequately informed on the danger of misuse of facilities and the attendant consequences that follow in the event. It is not in common to see people in real life, situation made miserable, by ministry especially in this part of the state, where training is regarded as a problem and therefore, used for luxuries, such as expensive cars and marriages.

We have also seen that bureaucratic bottle necks and redtapism in ministry obviously hamper quick processing of e-payment application thereby making it practically difficult. This is because, the purpose for which that application as made would have elapsed and the staff con not just leave the raining alone. It is diverted so, other uses and that will definitely affect the train programme.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter is intended to give a chapter summary of the study, conclusion and recommendation

5.2 Summary

Chapter one gave introductory explanation about information and communication technology. The information includes the roles of information technology and the role played by the ministry in the management of public funds.

The researcher also stated what informed him to go into this study, the objective he intended to achieve and the scope and limitations of the study.

In chapter two, review of literature were highlighted with particular reference to evaluation of computers, concept of modern and information system, departments in ministry of finance and their roles and e-payment.

Chapter three dealt with sources and methods employed in both data collection and analysis. A brief description on the study area was given structure questions were administered to collect data, while the

major analytical tools were tables and percentages. The sampling size and sampling techniques were stated.

Chapter four was concerned with data presentation, discussion and interpretation. The findings indicated short coming in both staff, individual and ministry, lack of adequate information rendered staff in capable or in qualified for information on computer.

In chapter five, the researcher summarized and conclude in the findings of the study. However, based on the findings, recommendation were made to help alleviate the problems highlighted.

5.3 Conclusion

In conclusion therefore, it is important for ministry to have a proper and indebt understanding of their internal and external environments so as to make appropriate alternation to such problems that may occur therein and also make appropriate provisions for future antiapartheid within and outside the ministry.

Any ministry that fails to do these would definitely have serious problems in coping with the ever information and may subsequently collapse.

5.4 Recommendation

From the available data on the historical background of ministry of finance and the findings from the analysis of the questionnaire administered, some certain weakness and strength are discovered and the following suggestion and recommendations shall be made.

1. It is clear from the staff support of the ministry computerization programme that it has a high proportions of elite staff who are most likely to support any programme that considered to be rational in this regard in this regard must be the ministry initiatives should tailor a metch the needs of the staff that belong to these category in order to reduce resistance that may occur to its to west.
2. Although the relationships between the staff can be considered to be good, but improvement can be made upon the present level of employee interrelationship. In this regard, sensitivity training can conducted in order to enhance mutual communication and understanding command employees.
3. The ministry of embark or recruitment exercise to employ more staff especially their staff) to fill the vacant polities.

4. ICT must be made to solve the existing problems and not just to berate the impression that at least a change has take place. Ministry interest must dominate all other personal interests in planning and implementing changes.
5. The ministry should try as much as possible to encourage the participation of junior staff in its decision making process. This can be done by allowing the representative(s) of the junior staff committee(s) participate in deliberation so as to give room for adequate sampling of options.

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Sokoto.

QUESTIONNAIRE

Dear Sir/Madam

I am a student of the above named Institution currently undertaking a research project in partial fulfillment of master Degree in Public Administration. Please kindly fill in the information requested in the questionnaire. Any information given will be treated with much regards and confidentiality.

Yours faithfully

Usman Muhammad Sokoto

Instructions: Tick (√) in the boxes of the correct answer

SECTION A: PERSONAL DATA

1. *Sex* Male [ ] Female [ ]
2. Age 18-30 [ ] 31-50 [ ] 51-Above [ ]
3. Qualification Masters [ ] Degree [ ] Dip [ ] others [ ]
4. Marital Status Married [ ] single [ ] widow [ ]
5. Position Management [ ] senior staff [ ]junior staff[ ]

SECTION B

1. Is the computer unit enough to serve the function of the ministry

a. Yes b. No

2. Is there need to create a computer department in the ministry

a. Yes b. No

3. Does the management staff use computers in record keeping

a. Yes b. No

4. Does the Ministry needs to recruit the additional computer staff

a. Yes b. No

5. Does the Ministry trained their staff in computer programme

a. Yes b. No

6. Does the ministry have competent computer operators

a. Yes b. No

7. Does the Ministry possessed enough computers

a. Yes b. No

8. Which type of computers are in use in the Ministry

a. Old b. Latest

9. Does e. payment receives public regard and recommendations

a. Yes b. No

10. Does the Ministry have sufficient standby generators

a. Yes b. No

11. Does E payment solve the problem of Guest Workers

a. Yes b. No

12. Did ICT enhance the management of public funds in Sokoto State?

a. Yes b. No

13. Did the introduction of computer usage brought improvement in the control of public funds in the state?

a. Yes b. No

14. Does ICT enhance the desired relationship between the Ministry and other Ministries with regards to management of public funds?

a. Yes b. No

15. What is your own view on question 14?